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(54) Title: **TEMPERATURE SENSITIVE STATE-CHANGING HYDROGEL COMPOSITION AND METHOD FOR THEIR PREPARATION**

(57) Abstract: The object of this invention is to provide a temperature-sensitive state-changing hydrogel composition and a method of producing the same. The hydrogel composition includes 1 - 10 wt % of branched gelation polymer, 0.5 - 5 wt % of electrolyte gelation polymer, 0.5 - 5 wt % of skin-communication enhancer, 1 - 10 wt % of natural biomaterial, 3 - 30 wt % of polyhydric alcohol, 1 - 10 wt % of functional additive, and 30 - 93 wt % of water based on a total weight of the composition. Hydrogel is transformed into a fluid state at 10 - 50 °C. The hydrogel composition is transformed into a fluid state due to body temperature when it comes into contact with the skin to be fluidized, so that cosmetics or drugs contained in hydrogel are uniformly and quickly delivered into the skin.

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